

# **WAIS Inc. Publishing: Systems & Services**

Wide Area Information Servers Inc. ©1995



## **WAIS evolution**

- Brewster Kahle - Thinking Machines, Inc.
- Government Agencies - mid/late 80's
  - ◊ Intelligence Community
    - Lots of Content - Geographically Dispersed Databases
- The "Wide Area Information Server" Consortium - 1989 -1991
  - ◊ Thinking Machines (search software and prototype implementation)
  - ◊ Apple Computer (client software design)
  - ◊ Dow Jones & Co (content)
  - ◊ KPMG Peat Marwick (customer that understands integration)



## WAIS evolution (cont.)

- First Freeware version released to the Internet - April, 1991
  - ◊ Public domain source code (server, protocol and client)
- Brewster Kahle leaves TMC to build a UNIX-based server system for Perot Systems and other customers - WAIS Inc. is born in Menlo Park, California - July, 1992
- WAISserver 1.0 ships - April, 1993
- WAISserver 2.0 ships - October, 1994

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## WAIS Inc. early customers

- WAISserver - Sold to Government Agencies, Universities, Hi-Tech Corporations
- Production Services
  - ◊ Dow Jones & Co.
  - ◊ Encyclopædia Britannica
  - ◊ Scholastic, Inc.
- Publishers gave WAIS Inc. the data and asked for a publishing system
  - ◊ Integrate Searching with Gopher server
    - No graphics - open and close files

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## Then came the WWW - 1993

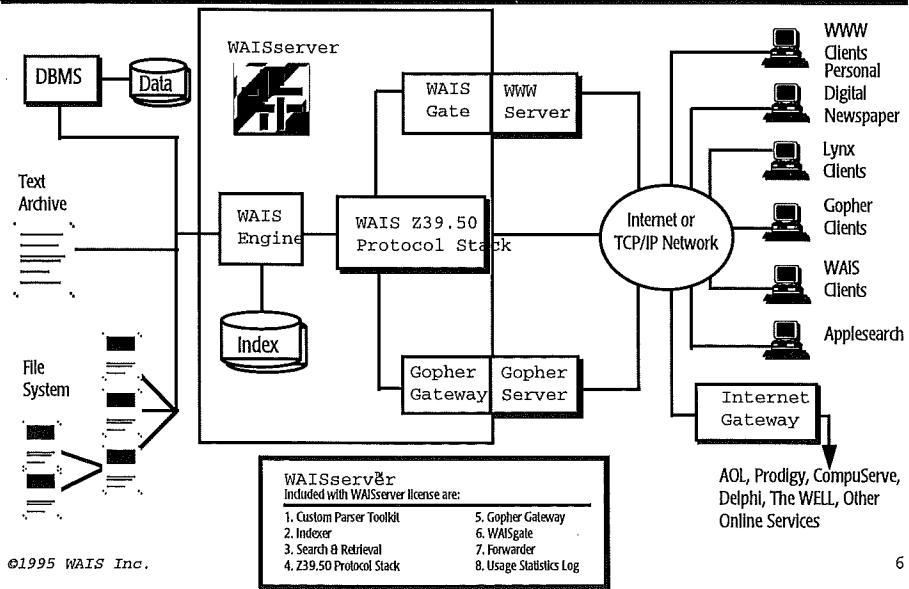
- Point and Click with fancy graphics, but the WWW server provided no professional publishing tools
- Publishers asked WAIS Inc. to integrate the WAISserver with their WWW servers
  - ◊ Searching with natural language queries
  - ◊ Usage Statistics- who is looking at what
  - ◊ WAISserver could be used with any WWW server software
    - CERN (creators of the WWW architecture)
    - NCSA (home of Mosaic)
    - Netsite (Netscape)
    - Spry

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## Where WAISserver Fits



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## **Publishers wanted more**

- Advertising
- User registration
- Content Alerting Options
- Usage Reports from the stats being collected
- Hosting Services

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## **WAIS Inc. enhanced WWW**

With WWW server and WAISserver running together, WAIS Inc. started enhancing WWW services with various forms of all of the following modules:

- Advertising
  - ◊ Logo only
  - ◊ Logo with sponsors WWW message
  - ◊ Logo with sponsors WWW server
  - ◊ Specific search queries result in selected logo/icon
  - ◊ Reports to provide sponsors with 'number of hits' report(s)

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## WAIS Inc. enhancements

- Registration
  - ◊ Basic user authentication (name & password)
  - ◊ Demographics
  - ◊ Send demographics to publisher
  - ◊ Establish and maintain a database for publisher
  - ◊ Reports by department or publication cut various ways
  - ◊ Tie user demographics to advertising 'hits'
- Billing
  - ◊ Collect financial information and forward to publisher
  - ◊ Collect financial information and credit account
  - ◊ Subscription
  - ◊ Transaction (pay as you go)
  - ◊ Personalized invoicing

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## WAIS Inc. enhancements

- Content Expiration
  - ◊ Automatically delete old information (sales, specials,etc.)
- Facsimile
  - ◊ Fill in online form and receive facsimile response
  - ◊ Dial for a WWW facsimile page(s)
  - ◊ Automatically receive facsimile of new content
- Management Reports
  - ◊ Stats on total usage
  - ◊ Technical stats to 'tune' the system
  - ◊ Registration database cuts (see above)

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## WAIS Inc. enhancements

- Audio
  - ◊ Audio clips (WAISserver can index almost anything)
  - ◊ Download audio clips
  - ◊ Search result is in audio format
  - ◊ Radio & live information
- Video
  - ◊ Video clips (WAISserver can index almost anything)
  - ◊ Download video clip
  - ◊ Continuously running video clips
- Bulletin Boards/Letters to the Editor/CHAT

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## WAIS Inc. enhancements

- Contests/Trivia/etc.
  - ◊ Forms for submitting answers on HTML pages that go on and on
- Gift-of-the-day/Highlight-of-the-day
  - ◊ Free news stories, sports clip, this-date-in-history that automatically changes on a daily basis
- User Satisfaction Survey(s)
  - ◊ Basic form with responses going to...
  - ◊ Need to summarize into reports

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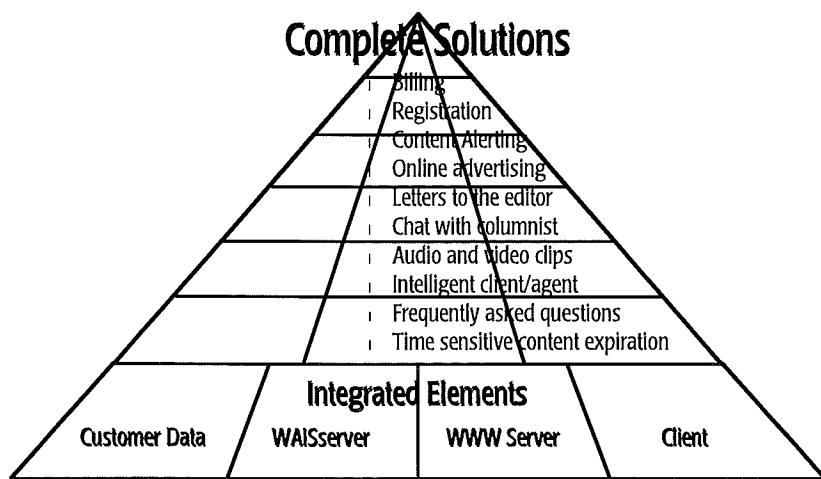
## WAIS Inc. enhancements

- Notification of New Content
  - ◊ Learn the habit of the end-user and notify them of new content automatically
  - ◊ Store last 10 searches
- Personal Digital Newspaper
  - ◊ Putting the power for personal profiling in the users hand
- Forms-based searching
  - ◊ Coaching the end-user to what they need (travel agent questionnaire about your personal vacation parameters which initiates a WAISserver search in the background)

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## Production Services



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## Is WAIS Inc. too expensive?

Perception at America Online that WAIS Inc. is twice as expensive

- Competition is HTML shops that do a home page and an ad
  - ◊ Very early in the learning curve
  - ◊ Unaware of total cost of running services
- Only comparison are companies that hire teams of five or more people
  - ◊ Able to leverage service expertise over multiple publishing partners



## WAIS Inc. Production Process

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1. Educate, Define Objective, Surf (sales team)
  - ◊ Educate customer on WWW, Gopher, WAIS technologies
  - ◊ What is the objective for the WWW service?
    - Marketing Exposure
    - Revenue (front-end and/or back-end)
    - Enhancement to another service (AOL, Print, etc.)
  - ◊ Understand the customers' competing services and WWW servers
    - Surf the net with the customer looking at competing/complimentary service



## WAIS Inc. Production Process

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2. Determine modules and technologies desired/required (sales team)
  - ◊ WWW with WAISserver
  - ◊ Advertising (how complex from the table above)
  - ◊ Registration (how does the publisher want it to work if there were no limits on the technology)
3. Where will the data come from? (sales team)
  - ◊ Multiple databases/satellite feeds/Corporate archives?
  - ◊ Cluster of corporate assets? (Word, Quark, Graphics, etc.)



## WAIS Inc. Production Process

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- 3 (cont'd). Where will the data come from? (sales team)
  - ◊ Is data clean? (fragmented, readable with a 1990's technology)
  - ◊ Does data exist? (new WWW venture may not have data)
  - ◊ How often does the data change by department, publication, etc.? (daily, weekly, monthly, dynamic, combination)
  - ◊ How much data is there? (megabytes, gigabytes, etc.)



## WAIS Inc. Production Process

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4. How do we get the data? (sales team)
  - ◊ Prefer FTP server on the Internet
  - ◊ Background WWW server
  - ◊ Tape, CD, other? (overnight carrier, US Mail)
  - ◊ Satellite feed
  - ◊ Dial-up
  - ◊ Is WAIS Inc. to build an archive from the data received from this day forward?



## WAIS Inc. Production Process

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5. Look and Feel (sales team)
  - ◊ Put technical hat away and assist the customer in drawing out what they need/want
    - Assume there is no limit to the technology
    - What should the user-experience be?
  - ◊ Graphics and artwork
    - WAIS to create or customer to assist from their graphics dept.



## WAIS Inc. Production Process

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6. Proposal (sales team and production services)
  - ◊ Only after items #1-#6 are answered can WAIS Inc. propose a comprehensive WWW server solution
  - ◊ WAIS Inc. Production Services Manager must see data from #3
  - ◊ Production Services Manager signs off on milestones, assumptions and data samples obtained above in proposal
  - ◊ Publisher frequently has us re-propose upon seeing proposal design from WAIS Inc.



## WAIS Inc. Production Process

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7. Purchase order (sales team)
  - ◊ Prefer contract, but PO with payments for milestones is sufficient
  - ◊ Contract may not be appropriate based on undefined issues above or what is included in maintainence once the system is completed
8. Design (production services)
  - ◊ Storyboard developed for prioritizing module implementation
  - ◊ Refine sales proposal into a systems requirement/specification that publisher/partner will sign



## WAIS Inc. Production Process

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- ◊ Obtain data and test process on getting data in a consistent format
- ◊ Determine what feed handlers will be required and spec them
- ◊ Provide publisher with detailed mock-up
  - HTML
  - Graphical Design
  - Search area with fake data
  - Sample ad
  - How user registration will appear to end-user
- ◊ (Sales team polices process for 'creeping feature syndrome' with production service manager)



## WAIS Inc. Production Process

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9. Publisher sign-off on requirement/spec document and mock-up (production services)
  - ◊ Publisher and WAIS Inc. agree on changes to System Requirements and/or System Specification
  - ◊ Publisher explains desired changes to mock-up
    - Graphics changed or moved
    - Different fields for searching
    - Copyright notices, legal issues surface
    - Determine if new/different data required
  - ◊ (Sales team renegotiates based on new databases, new features, etc.)



## WAIS Inc. Production Process

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10. Build the System (production services)
  - ◊ Build the feed handlers
  - ◊ Get data in consistent format(s)
  - ◊ Build the databases
  - ◊ Integrate the databases
  - ◊ Establish links to other WWW sites, content
  - ◊ Obtain hardware and software required
  - ◊ Build maintenance software (staging areas, customer trigger files, reports)



## WAIS Inc. Production Process

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11. Launch System (production services and customer service)
  - ◊ Train the customer
  - ◊ Test staging areas and trigger files
  - ◊ Drive sample reports
  - ◊ Communicate maintenance and escalation procedures
  - ◊ Participate in marketing and press releases
  - ◊ WAIS Inc. customer service assumes responsibility
  - ◊ Determine maintenance costs and sign contract if not completed

## WAIS Inc. Production Process

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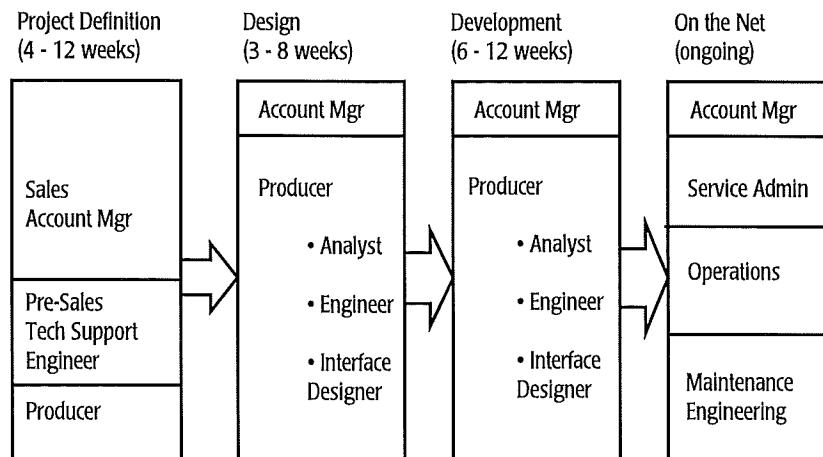
12. On-going support and maintenance (customer service)
  - ◊ Server(s) running at WAIS Inc. or at publisher location
  - ◊ Daily, weekly, monthly reports
  - ◊ 7x24 operation (modify procedures- trouble reporting/escalation)
  - ◊ Sales proposes changes required (then back to production services)
  - ◊ Client problems (I can't access the server with 'X' client)
  - ◊ Update advertising links, monitor data feeds, etc.
  - ◊ Monitor usage stats to ensure proper bandwidth, storage, RAM, processing power, etc.

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## A team approach...

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## There is an alternative!

- For \$25,000 to \$50,000 WAIS Inc. will contract for items #1 to #8 and/or #9
- Desirable alternative for WAIS Inc. in most circumstances
  - ◊ Look and Feel always changes
  - ◊ Databases change
  - ◊ Other departments get excited and want in
  - ◊ Allows us to do fixed price without having to drive for items #1- #5 prior to proposal when the publisher doesn't have answers to these items



## There is an alternative!

- Advantageous for publisher
  - ◊ Allows publisher to determine what they need without contracting based on unknowns
  - ◊ Provides them with a system requirement/specification document and working mock-up for WAIS Inc. to provide a fixed fee bid to proceed OR for publisher to bid on the market
  - ◊ Limits exposure on a project that people do not understand



## Working with America Online IP's

### 1-A) The model above contracted for directly between WAIS Inc. and IP

- ◊ Usually \$100K to \$500K to build based on
  - The data (how much/different/often, how do we get it?)
  - The 'modules' desired and/or required
  - How deep the modules go (i.e. registration with authentication, database, tying the database to reports, etc.)
- ◊ Maintenance of \$5K to \$25K per month based on
  - Who runs the server?
  - How often is content updated?
  - How many and dynamic are reports?
  - Who does the day-to-day advertiser updates, etc.?
  - Does the publisher take the initial call for trouble reporting from the end-user?



## Working with America Online IP's Cont.

### 1-B) America Online contracts WAIS Inc. to build service and subsidizes the development fees

- ◊ \$150,000 project completed with \$75,000 from the IP and \$75,000 from America Online brand
- ◊ Maintenance negotiable with minimum monthly guarantee to ensure server uptime



## Working with America Online IP's Cont.

### 2) Revenue Sharing

- WAIS Inc. does development for \$0 based on the following revenue sharing outline

Item	
Where does the content come from?	40%
Who does billing, sales & marketing?	30%
Who runs the server?	20%
Any special client software (PDN)?	10%



## Working with America Online IP's Cont.

- Usually results in WAIS Inc. receiving 20% for server operations and 10% for client software development/support. 40% for content usually goes to the publisher/IP, and billing, sales and marketing is negotiated
- REQUIRES DUE DILIGENCE BY WAIS INC. ON THE PUBLISHER/IP PRIOR TO AN AGREEMENT TO DESIGN/BUILD/MAINTAIN
  - Microsoft Network requires publishers to wait 2 months as their proposal is being evaluated



## Other Considerations

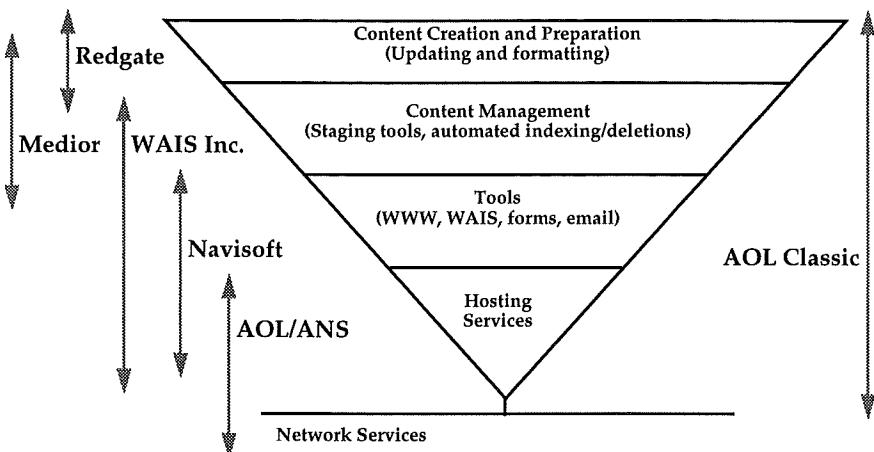
- IP who wants basic WWW site (home page, no searching/modules)
  - ◊ Call WAIS to determine possibilities
    - WAIS Inc. VAR builds it for the Publisher/IP; AOL Account team maintains control
    - NaviSoft tools
    - WAIS Inc. tools (WAISserver)
    - AOL Brand to eventually provide WWW authoring tools for Grandma and small businesses



## Other Considerations

- Major IP who wants to start small (home page only or subsidiary interest)
  - ◊ Call WAIS Inc. for joint meetings to scope corporate parameters prior to a subsidiary setting the wrong direction
  - ◊ May be appropriate for WAIS Inc. to build a set of templates for subsidiaries/departments for consistent look and feel
    - Integrating independent servers easier in the future
    - Agree on consistent database formats for future
  - ◊ Local VAR or HTML house can build based on corporate direction, but includes considerations from AOL/WAIS

## What it takes...



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## Who's Who at WAIS Inc.

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Product & Production Services Sales, Mktg
- John Duhring- VP, Bus. Devel.    duhring@wais.com    415-356-5406  
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